

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000056**Date Inspected:** 09-Jan-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:****Summary of Items Observed:**

Office of Structural Materials Quality Assurance Inspector (QA), Mark Wright was present as requested to observe quality control functions related to procedure qualification record (PQR) testing at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA Inspector observed the continuation welding of a Procedure Qualification (PQR) test plate identified as HP-2006117-2 and HP2006116. The HP2006117-2 test was conducted on A709-50-2 steel using Flux Cored Arc Welding (FCAW); Hyundai Super cored 71H, 1.4mm diameter electrode in the 1G (flat) position with a root opening of 6mm to AWS D1.5, Section 5.13 (non-standard) with a ceramic backing for the first three passes and then was welded with Submerged Arc Welding (SAW) using JW-3 4.8mm Chinese welding wire and JF-B flux. The other PQR HP2006116 using Flux Core Arc Welding (FCAW), using E71T-1 1.4mm electrode, in the 1G (flat) position, with a ceramic backing bar. The welding was performed per the AWS D1.5, Section 5.13 requirements. The QA Inspector observed ZPMC Quality Control (QC) recording the essential variable (amps, volts, travel speed) for each pass and randomly verified the parameters using an Amprobe® amperage / voltage meter and a stopwatch. The welding appeared to comply with the contract documents.

See TL-6032s for details of this test.

Summary of Conversations:

See Task Leader journal for this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

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remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Wright,Mark	Quality Assurance Inspector
Reviewed By:	McClary,David	QA Reviewer
